



## Wetlands

### What are wetlands?

- Wetlands are often in-between places. They lie between deep water (such as lakes and streams) and dry land.
- Although wetlands are usually areas where the soil is covered with water, a wetland might not be wet year-round. Some important wetlands are only seasonally wet.
- In these transition zones, the flow of water, the cycling of nutrients and the energy of the sun meet to produce a unique ecosystem.
- Wetlands that stand alone and are not near a body of water are called isolated wetlands.
- These ecosystems are characterized by hydrology, soils and vegetation.
  - Wetlands hydrology refers to the presence of water at or above the soil surface for a long enough time of the year to significantly influence the plant types and soils that occur in the area.
  - Nearly 5,000 different plants may live as wetlands vegetation in the United States. A few of these plants are cattails, bulrushes, spagnum moss, bald cypress, willows, sedges, rushes, arrowheads and lily pads.
  - Approximately 2,000 named soils in the United States occur in wetlands. These hydric soils may consist predominantly of decomposed plant material, or they may have a thick layer of decomposing plant material on the surface.

### Why are wetlands important?

- Wetlands contribute to our health, economy, quality of life and the well being of the natural environment.
  - More than 98 million people hunt, fish, birdwatch or photograph wildlife that live in wetlands.
  - They spend \$59.5 billion annually on these activities.
- Wetlands provide habitat for fish and wildlife.
  - More than 1/3 of America's threatened and endangered species live only in wetlands, which means they need the wetlands to survive.
  - More than 200 species of birds rely on wetlands for feeding, nesting, foraging and roosting.
- Wetlands naturally store and filter nutrients and sediments.
  - Calm wetland waters, with their flat surface and flow characteristics, allow these materials to settle out of the water column, where plants in the wetland take up certain nutrients from the water.
  - As a result, our lakes, rivers and streams are cleaner, and our drinking water is safer.
  - Wetlands also recharge our underground aquifers. More than 70% of Indiana residents rely on ground water for part or all of their drinking water needs.
- Wetlands protect our homes from floods.
  - Like sponges, wetlands soak up and slowly release floodwaters. This lowers flood heights and slows the flow of water down rivers and streams.
  - Wetlands along rivers, lakes and streams also control erosion, holding soil in place to absorb the energy of waves and buffer strong currents.

### What is hurting wetlands?

- Some wetlands have been drained for development, farming or mosquito control.
- Fill material for development has been disposed of in wetlands.
- The addition of impervious surfaces, such as roads and parking lots, increases water and pollutant runoff into wetlands.

### What is IDEM doing to protect wetlands?

- IDEM continues to enforce our state water quality standards to protect Indiana wetlands from harm.
- IDEM is partnering with the Indiana Department of Natural Resources and the Office of the Commissioner of Agriculture to help Hoosiers learn about wetlands and the important place they hold in our world. Their joint efforts are highlighted at <http://www.in.gov/wetlands>.
- Part of IDEM's educational outreach to Hoosiers on the Indiana Wetlands Web site includes four publications to help citizens, contractors, developers and farmers better understand the state requirements for activities in Indiana's wetlands. The four publications are:
  - Do I Need A Permit For That?** - This brochure provides a general guide to when you need a permit for constructing in an Indiana Wetland. (<http://www.in.gov/wetlands/publications/doneedpermit.pdf>)
  - Dredging? Filling? Excavating?** - This brochure describes how IDEM regulates construction in wetlands and other waters. (<http://www.in.gov/wetlands/publications/dredgfill.pdf>)

**Waterways Permitting Handbook** - This manual provides detailed information on state and federal requirements for obtaining a permit for constructing in an Indiana Wetland. (<http://www.in.gov/wetlands/publications/cleanwater.pdf>)

**Get Your Feet Wet In Indiana's Wetlands** - This brochure provides a general overview of the many facets of Indiana's wetlands. (<http://www.in.gov/wetlands/publications/getfeetwet.pdf>).

### **Where can I get more information about wetlands?**

More information about wetlands is available through IDEM's Office of Water Quality at (800) 451-6027, IDEM's Web page at: <http://www.in.gov/idem/water/planbr/401/index.html> or the wetlands Web page at <http://www.in.gov/wetlands> .